

(MC58) AE002540, *Buchnera aphidocola* (unspecified) M80817, *Buchnera aphidocola* (SGS) AF008210, *Buchnera* sp. (APS) AP000398, *Haemophilus influenza* (RD KW20) U32848, *Escherichia coli* (unspecified) M11056, *Escherichia coli* (K-12) AE000394, *Proteus mirabilis* (unspecified) M58352, *Pseudomonas aeruginosa* (PAO1) AE004968, *Pseudomonas putida* (unspecified) P25752, *Salmonella typhi* (CT18) no accession number, *Yersinia pestis* (Orientalis) no accession number, *Xylella fastidiosa* (unspecified) AE004083, *Campylobacter jejuni* (NCTC 11168) AL139076, *Helicobacter pylori* (26695) AE000645, *Helicobacter pylori* (J99) AE001557, *Micrococcus luteus* (S66) U64884, *Mycobacterium avium* (104) AF222789, *Mycobacterium bovis* (AF2122/97) no accession number, *Mycobacterium leprae* (Lortist 6) L39923, *Mycobacterium tuberculosis* (H37Rv) AL021426 X92504, *Streptomyces bikiniensis* (Zorbonensis) M83112, *Streptomyces coelicolor* (A3(2)) M82836 AL049826 AF031590, *Bacillus halodurans* (C-125) AB013492, *Bacillus subtilis* (168) X62539 AL009126, *Mycoplasma capricolum* (mcs5) P14982, *Mycoplasma genitalium* (G-37) U39713, *Mycoplasma pneumoniae* (M-129) U00089, *Staphylococcus aureus* (ISP3) AF135268, *Ureaplasma urealyticum* (3/1) AE002158, *Pseudanabaena* sp. (PCC6903) J000513, *Synechocystis* sp. (PCC6803) X81989, *Borellia burgdorferi* (212) Z12166, *Borellia burgdorferi* (B31) AE000783, *Treponema pallidum* (Nichols) P50069, *Chlamydia trachomatis* (serovar D) AE001351, *Chlamydia muridarum* (trachomatis MoPn) AE002160, *Chlamydophila pneumoniae* (CWL 029) AE001673, *Chlamydophila pneumoniae* (AR39) AE002251, *Deinococcus radiodurans* (R1) AE002049, *Thermotoga maritima* (MSB8) AAD36531, *B.burgdorferi*, *B.burgdorferi*-partial, *C.burnetii*, *C.pneumoniae*-2, *C.trachomatis*, *H.influenza*, *H.pylori*-48, *M.leprae*, *M.luteus*, *M.tuberculosis*-2, *M.bovis*, *Pseudanabaena*-6903, *R.prowazeki*, *S.bikiniensis*, *Synechocystis*6803, *Staphylococcus aureus*, and *S. pneumoniae*.

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Cont

9. (Amended) The method of claim 8, wherein said polypeptide has at least 95% identity to the corresponding twenty amino acids: R11, L12, F18, R46, G48, V51, K53, K54, A59, V60, R62, N63, K66, R67, R70, L80, D84, V86, L101, and L105 of *E. coli* RNase P.

13. (Amended) The method of claim 11, wherein said contacting is carried out in a buffer comprising 10-40 $\mu\text{g/ml}$ carbonic anhydrase and 10-100 $\mu\text{g/ml}$ polyC.

Add the following new claims 15-21.

15. (New) The polypeptide of claim 1, having 100% identity to the corresponding twenty amino acids: R11, L12, F18, R46, G48, V51, K53, K54, A59, V60, R62, N63, K66, R67, R70, L80, D84, V86, L101, and L105 of *E. coli* RNase P.

16. (New) The polypeptide of claim 1, wherein said polypeptide comprises an amino acid sequence at least 95% identical to any one of SEQ ID NOS: 20-38.

17. (New) The polypeptide of claim 1, wherein said polypeptide, when combined with an RNA subunit to form an RNase P holoenzyme, has at least 20% of the enzymatic activity of an *E. coli* or *B. subtilis* RNase P holoenzyme.

18. (New) The method of claim 14, wherein said buffer comprises 2-10 mM DTT.

19. (New) The method of claim 9, wherein said polypeptide has 100% identity to the corresponding twenty amino acids: R11, L12, F18, R46, G48, V51, K53, K54, A59, V60, R62, N63, K66, R67, R70, L80, D84, V86, L101, and L105 of *E. coli* RNase P.